AMENDMENTS TO THE SPECIFICATION:

Please amend the paragraph beginning at line 14 in page 12 as follows:

It is necessary for the light-emitting layer section in the double heterostructure to raise the barrier height between the cladding layer and the active layer to a certain level or more, in order to enhance the carrier confinement effect in the active layer, to thereby improve the internal quantum efficiency. As shown in a schematic band chart of FIG. 10 (Ec and Ev express ~~nuclear~~ energy levels at the bottom of the conduction band, and at the top of the valence band, respectively), direct bonding of the contact layer to the cladding layer sometimes results in formation of a relatively high heterobarrier between the cladding layer and the contact layer due to bonding-induced bend of the band. The barrier height ΔE increases as the band edge discontinuity between the cladding layer and the contact layer increases, and is advantageous in inhibiting movement of carriers, in particular holes having a larger effective mass. For an exemplary case where a metal electrode is used, the electrode must be formed so as to attain a partial coverage, because the total coverage by the metal electrode disables the light extraction. In this case, in order to improve the light extraction efficiency, it is necessary to enhance the in-plane current spreading outwardly from the electrode. The metal electrode is often formed on the light-emitting layer section while placing the contact layer such as GaAs in between, wherein the formation of an appropriately high barrier height between the contact layer and the light-emitting layer section is advantageous for the metal

electrode, because the in-plane current spreading can be promoted by virtue of the carrier dam-up effect of the barrier. The formation of high barrier height inevitably increases series resistance.

Please amend the paragraph beginning at line 17 in page 22 as follows:

It is supposed herein that direct bonding of an InGaAs layer and an AlGaInP layer may result in formation of a somewhat higher heterobarrier at the bonded interface, and this may consequently raise the series resistance component. For the purpose of reducing the resistivity, it is allowable to respectively insert, between the contact layers 7, 9 in contact with the ITO transparent electrode layers 8, 10 and the AlGaInP cladding layers 6, **5** 4, intermediate layers 11, 12 having a band gap energy intermediate of those of the both, as indicated by dashed lines in FIG. 1. The intermediate layers 11, 12 can be configured typically as containing at least any one of AlGaAs, GaInP and AlGaInP, and it is also allowable to configure the entire portion of each of the intermediate layers as a single AlGaAs layer. Even for the case where such configuration is adopted, thickness of each of the intermediate layers can be adjusted to as small as approximately 0.1 μm or below (0.01 μm or above: further thinning results in disappearance of the band structure of the bulk, and fails in obtaining a desired bonded structure), so that the thinning of the layer is successful in shortening the epitaxial growth time, improving the productivity, and reducing a risk of lowering the emission efficiency through reduction in increase in the series resistance due to formation of the intermediate layers.